LDWSF 12.3.60 u3 Pace Analytical Services, Inc.



ANALYTICAL RESULTS

Project:

Residue TCLP

Pace Project No.: 252165

Sample: Drum Reconditioning

Lab ID: 252165001

Collected: 09/24/09 10:30 Received: 09/24/09 12:15 Matrix: Solid

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Leachate Met	hod/Date: EPA	A 1311; 10/01/09 17	7:00					
Arsenic	ND m	g/L	1.0	1	10/02/09 16:30	10/05/09 18:34	7440-38-2		
Barium	ND m	g/L	5.0	1	10/02/09 16:30	10/05/09 18:34	7440-39-3		
Cadmium	ND m	ig/L	0.20	1	10/02/09 16:30	10/05/09 18:34	7440-43-9		
Chromium	ND m	ıg/L	1.0	1	10/02/09 16:30	10/05/09 18:34	7440-47-3		
Lead	ND m	ıg/L	1.0	1	10/02/09 16:30	10/05/09 18:34	7439-92-1		
Selenium	ND m	ig/L	0.20	1	10/02/09 16:30	10/05/09 18:34	7782-49-2		
Silver	ND m	ig/L	1.0	1	10/02/09 16:30	10/05/09 18:34	7440-22-4		
7470 Mercury, TCLP	Analytical Me	thod: EPA 747	0 Preparation Met	hod: EF	PA 7470				
	Leachate Met	hod/Date: EP/	A 1311; 10/01/09 17	7:00					
Mercury	ND u	g/L	5.0	1	10/07/09 13:50	10/08/09 09:56	7439-97-6		
Percent Moisture	Analytical Me	thod: ASTM D	2974-87						
Percent Moisture	3.0 %		0.10	1		10/02/09 11:45			

Date: 10/08/2009 04:05 PM

REPORT OF LABORATORY ANALYSIS

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October 08, 2009

Rick Cabuco ICS Washington 7152 1st Avenue South Seattle, WA 98108

RE: Project: Residue TCLP

Pace Project No.: 252165

Dear Rick Cabuco:

Enclosed are the analytical results for sample(s) received by the laboratory on September 24, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Natalie Taylor

Natalie Jaylos

natalie.taylor@pacelabs.com

Project Manager

Enclosures



CERTIFICATIONS

Project:

Residue TCLP

Pace Project No.:

252165

Washington Certification IDs
Washington Certification #: C1229
Oregon Certification #: WA200007
Florida/NELAP Certification #: E87617 Alaska CS Certification #: UST-025

Alaska Drinking Water Micro Certification #: WA01230 Alaska Drinking Water VOC Certification #: WA01-09 California Certification #: 01153CA

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SAMPLE ANALYTE COUNT

Project:

Residue TCLP

Pace Project No.:

252165

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
252165001	Drum Reconditioning Residue	ASTM D2974-87	DJK	1	PASI-S
		EPA 6010	BGA	7	PASI-S
		EPA 7470	BGA	1	PASI-S



QUALITY CONTROL DATA

Project:

Residue TCLP

Pace Project No.:

QC Batch Method:

252165

QC Batch:

PMST/1104

ASTM D2974-87

Analysis Method:

ASTM D2974-87

Analysis Description:

Dry Weight/Percent Moisture

Associated Lab Samples:

Parameter

SAMPLE DUPLICATE: 12824

252165001

251993005 Result

Dup

Result

RPD

Qualifiers

Percent Moisture

%

Units

22.0

22.0

0

Date: 10/08/2009 04:05 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project:

Residue TCLP

Pace Project No.:

252165

QC Batch:

MERP/1084

Analysis Method:

EPA 7470

EPA 7470

Analysis Description:

7470 Mercury TCLP

METHOD BLANK: 13099

QC Batch Method:

Matrix: Water

Associated Lab Samples:

Associated Lab Samples:

252165001

252165001

Blank

Reporting

Result

Limit

Analyzed

Qualifiers

Mercury

ug/L

Units

Units

ND

5.0 10/08/09 09:50

LABORATORY CONTROL SAMPLE:

Parameter

Parameter

13100

Spike Conc.

LCS Result

LCS % Rec % Rec Limits

Qualifiers

Mercury

ug/L

Units

ug/L

5

5.3

13101

105

85-115

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:

MSD MS

MSD

MSD

% Rec

Qual

MS 252165001 Spike

Spike Conc.

Result

% Rec Result 15.5

% Rec

Limits **RPD**

Mercury

Parameter

Result

Conc. ND

15

15.6

104

MS

85-115 103

Date: 10/08/2009 04:05 PM





QUALITY CONTROL DATA

Project:

Residue TCLP

Pace Project No.:

252165

QC Batch:

MPRP/1295

MPRP/12

Analysis Method:

EPA 6010

QC Batch Method:

EPA 3010

Analysis Description:

6010 MET TCLP

METHOD BLANK: 12949

Matrix: Water

Associated Lab Samples:

Associated Lab Samples:

252165001

252165001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	1.0	10/05/09 18:15	<u> </u>
Barium	mg/L	ND	5.0	10/05/09 18:15	
Cadmium	mg/L	ND	0.20	10/05/09 18:15	
Chromium	mg/L	ND	1.0	10/05/09 18:15	
Lead	mg/L	ND	1.0	10/05/09 18:15	
Selenium	mg/L	ND	0.20	10/05/09 18:15	
Silver	mg/L	ND	1.0	10/05/09 18:15	

LABORATORY CONTROL SAM	PLE & LCSD: 12950		12	951						
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Arsenic	mg/L	.5	0,49	0.47	98	95	80-120	3	20	
Barium	mg/L	.5	0.56	0.53	111	107	80-120	4	20	
Cadmium	mg/L	.5	0.49	0.48	97	95	80-120	2	20	
Chromium	mg/L	.5	0.51	0.50	102	100	80-120	2	20	
Lead	mg/L	.5	0.52	0.51	104	102	80-120	2	20	
Selenium	mg/L	.5	0.49	0.48	97	95	80-120	2	20	
Silver	mg/L	.25	0.20	0.20	81	80	80-120	2	20	



QUALIFIERS

Project:

Residue TCLP

Pace Project No.:

252165

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-S

Pace Analytical Services - Seattle

Date: 10/08/2009 04:05 PM

